Claims

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1. A voice transmission apparatus arranged between a subscriber-side exchange to which a subscriber-side terminal apparatus is connected and a network, characterized in that said voice transmission apparatus comprises:

a first interface means for exchanging a signal with said subscriber-side exchange;

a second interface means for exchanging a signal with said network;

a voice signal processing means for detecting sound portions of a voice signal which constitutes said signal, for encoding the voice signal having sound portions, and for decoding an encoded voice signal inputted thereto;

a packet processing means for assembling packets from the voice signal encoded by said voice signal processing means, and for disassembling packets inputted thereto into a signal and for supplying it to said voice signal processing means;

a measurement means for measuring an amount of packets which are discarded from packets associated with a voice signal included in the received packets, and an amount of jitter of the packets associated with the voice signal;

a calling restriction determination means for determining whether to impose a calling restriction based on measurement results obtained by said measurement means; and

a control signal creating means for creating a control signal for imposing a calling restriction on said subscriber-side exchange when said calling restriction determination means determines that the calling restriction needs to be imposed on said subscriber-side exchange.

2. The voice transmission apparatus according to Claim
1, characterized in that the packets include an IP packet, a
UDP packet, and an RTP packet.

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- 3. The voice transmission apparatus according to Claim 1, characterized in that said second interface means is an interface means which complies with Ethernet.
- 4. The voice transmission apparatus according to Claim
 1, characterized in that said control signal output means is
 an ITU-T Q.50 DLC processing means for outputting the control
 signal for imposing a calling restriction on said
 subscriber-side exchange according to ITU-T recommendation
 Q.50.